

DOCUMENT RESUME

ED 418 937

SP 037 901

AUTHOR Ross, Craig M.
TITLE Computer Technology and Its Impact on Recreation and Sport Programs.
PUB DATE 1998-02-13
NOTE 23p.; Paper presented at the Annual Conference of the Midwest AAHPERD (Fort Wayne, IN, February 13, 1998).
PUB TYPE Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Athletics; *Computer Software; Elementary Secondary Education; Exercise; Leisure Time; Parks; *Physical Education; Physical Fitness; Recreational Activities; *Recreational Programs; *Scheduling
IDENTIFIERS Health Risk Appraisal; Parks and Recreation Professionals

ABSTRACT

This paper describes several types of computer programs that can be useful to sports and recreation programs. Computerized tournament scheduling software is helpful to recreation and parks staff working with tournaments of 50 teams/individuals or more. Important features include team capacity, league formation, scheduling conflicts, scheduling formats, master schedule, team schedules, reports, team rosters, standings, and optical scanning. Computerized facility scheduling software is helpful at recreational facilities, though before making a purchase, it is important to consider several factors that are unique to each base. The user must understand the components of the system, be familiar with the facility environment, and know what to look for in selecting software and hardware. Computerized recreation registration software programs help with scheduled events that are programmed for parks and recreation agencies. Again, the user must understand the system components, facility environment, and software and hardware needs. Fitness/wellness software helps fitness practitioners with managing their programs. The practitioners must understand the types of fitness/wellness software to select from, which include fitness assessment profiles, health risk assessment, personal fitness programs, and exercise prescriptions. Charts for each type of software are attached. (SM)

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Computer Technology and Its Impact on Recreation and Sport Programs

- **Sport Scheduling Software**
- **Facility Scheduling Software**
- **Recreation Registration Software**
- **Fitness/Wellness Software**

**Presented at the Midwest AAHPERD Convention
Fort Wayne, Indiana
February 13, 1998**

by

**Dr. Craig M. Ross
Indiana University**

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The text in the attached presentation material is original material. However, the charts were developed by myself and first appeared in Athletic Business magazine and should be referenced as such:

Sport Scheduling Software Chart

Athletic Business, 1996, 20(4), pp. 47-52.

Facility Scheduling Software Chart

Athletic Business, 1997, 21(4), pp. 55-61.

Recreation Registration Software Chart

Athletic Business, 1997, 21(10), pp. 59-65.

COMPUTERIZED TOURNAMENT SCHEDULING SOFTWARE

I. Introduction

Probably the question most often asked and one of the greatest computer need expressed by recreation and park staffs pertains to sport scheduling software which includes league and tournament scheduling programs. There are a number of software scheduling programs currently on the market ranging in price from \$89 to \$3,000. The wide range of prices reflects the diversity and complexity of the features of each software package.

II. Is Computerized Sport Scheduling For You?

Computerized sport scheduling programs are not suited for every sport program. Realistically, computerized scheduling is best designed for tournaments of 50 teams/individuals or more. Less than this number, the recreational sports programmer would probably be wise to schedule the tournament by hand. The amount of preliminary set-up required for any of the commercially available computer programs would not be worth the time for less than 50 teams/individuals. In some cases of where there is a small number of entries, simple word processing features such as tables and merging are all that one needs. However, for large tournaments, computerized scheduling is the only way to effectively manage the details involved with tournament scheduling.

Also, it is important that the department is willing to invest time and resources in converting from a manual system to a computerized system. Time will need to be devoted to reviewing the number of software packages on the market and identifying which program would be best for that particular base. There will also be a considerable amount of time actually spent on converting the present manual system to the computer version. Development of facility codes, division and leagues codes, establishing scheduling priorities and creating new entry forms are just a few of the tasks that will need to be completed before beginning the process.

III. Suggested features in a sport scheduling package.

When considering the purchase of a sport scheduling software program, there are a number of key features that should be considered. However, what is best for each particular base will depend to a large degree on the number of teams entering, the league/tournament formats chosen, existing computer hardware, and budget limitations of the agency. The following are some of the suggested features that should be considered before purchasing any scheduling software:

Team Capacity. Depending on the tournament needs, make sure the program can handle the upper limits in terms of teams, leagues, divisions, and the number of different facility sites that could be used.

League Formation. It is very important that the staff have the capability of deciding whether the selection of teams and the creation of both leagues and divisions will be established through an automatic random selection by the computer, or be a set of staff-defined criteria.

Scheduling Conflicts. The program should check for scheduling overlaps as well as all for re-scheduling of game dates for any reason including team conflicts, weather cancellations and other programming concerns.

Scheduling Formats. The program should be able to schedule for round robin, double round robin, single elimination, double elimination, meets and the various challenge tournament formats. With each of these formats, the ability to seed teams and assign handicap scores is important.

Master Schedule. A valuable feature of a computerized system is that it allows for the creation of master schedule reports that can be viewed on-screen or on a printed report for the entire tournament schedule in advance for a particular date, facility, league or team. Being able to view these reports lends great flexibility to the staff for rescheduling games, preparing sport facilities and the monitoring of the number and the skill level of game officials, supervisors and other employees.

Team Schedules. In addition to developing a master schedule, most all programs will provide team scheduling. However, items to look for in team scheduling include on-screen viewing as well as hardcopy or disk files creation, editing capability, and home vs. visitor assignments. A number of programs will assign the "home team" classification to the same team for every game in the tournament.

Reports. The design and actual print-outs of reports and team schedules should be flexible enough and resemble those that were being used when scheduling was done manually. Because a computerized system can create detailed reports that are specific to the sports program, it is probably the most important component of the scheduling program. Game times, because of participant confusion, should be printed in standard am/pm format rather than military time, dates should also include the day of the week, and facility sites should be represented by the name of the facility rather than a code. Printing of individual game score sheets, including eligible players, is also very beneficial. Facility schedules/reports by specific sites, by court/field and be either a range of dates, times, divisions or leagues can all be useful when managing sport tournaments.

Team Rosters. The program should provide a means of generating and maintaining team listings and rosters by sport, division and leagues as well as an alphabetical phone list with addresses of team captains for mail-merging of form letters.

Standings. The capability to generate league standings with won-loss records and "games behind" calculations are important to some league administrators.

Optical Scanning. For large tournaments, being able to scan into the system team entry form information can save numerous hours of data entry. It also eliminates the many data entry errors that frequently occur with a large number of entries.

In summary, an effective computerized sport scheduling program can save many hours of routine and tedious work. In addition, a computerized program can help to eliminate the human mistakes that are inevitable with scheduling. It has enabled many to do more complete and accurate scheduling in much less time than they previously spent with their manual system.

COMPUTERIZED FACILITY SCHEDULING SOFTWARE

I. Introduction

Successful scheduling of recreational facilities is dependent upon a number of factors that are unique to each base. Each base will have specific needs and program interests that are specific to their particular situation. Some will be solely responsible for scheduling recreation facilities that serve the entire base while others will need to prioritize building needs using preferred and agreed upon scheduling time blocks. In this scenario, a mutual understanding, communication and cooperative spirit must exist if the scheduling and management processes are to be effective.

II. Elements of a computerized facility reservation system

As we discuss facility reservations and how this process can be computerized, it is important that we understand the components of the system. A complete reservation system should include the following modules:

1. The actual reservation system module....front counter data entry, user check-in, site supervision, etc.
2. Office support module....management information, general ledger, accounts receivable, equipment inventory, etc.
3. Word processing module....access to a comprehensive word processing capabilities for letters, memos, mailing lists, etc.
4. Spreadsheet analysis....access to electronic spreadsheets for determining relationships, averages of users by facility, etc.
5. Database management....access to database capabilities to organize facility data management needs to support trend analysis, storage and retrieval of data and site analysis.
6. Project management....allowing recreation managers to plan schedules, assign resources, develop maintenance

schedules for the various facility user groups.

III. Understanding your environment.....questions you need to ask yourself.

For a facility reservation system to be successful, many items need to be taken into consideration. Each of us has different needs and constraints, different facilities and varying levels of staff/financial support and they all must be taken into consideration before a system can be effectively computerized. Questions that should be addressed include:

1. Are you limited to a particular platform or type of computer?
2. How much money is available to purchase the hardware and the software?
3. What is the knowledge level of your computer support staff?
4. What is your current manual system, specifically:
 - a. what facilities are reserved?
 - b. are there fees and charges?
 - c. are reservations made during certain hours of the day, week or month?
 - d. what information do you maintain on each user?
 - e. what reports would you like?
 1. maintenance
 2. security
 3. custodial
 4. site supervisory

IV. Software selection.....what to look for.

Once you have identified your needs, the next step is to list features that you want the computerized system to provide. The goal of any system is to provide instant access to all of your staff with respect to accurate site availability information. Basically, a system should include:

1. Permit registration for events and facilities.
2. Single or multiple date reservations.
3. On-screen view of available time slots.
4. Instant access for pre-registration information.
5. Management reports to assist with preparations for scheduled events and facility usage.

Specifically, features that may or may not be important to you to discuss with a software vendor might include:

1. Automatically assigns a unique reservation confirmation number.
2. Allows reactivation of canceled reservations.
3. Tracks deposit transactions.
4. Allows you to overbook a site if you wish by a certain percentage factor by season or by month.
5. Calculates the estimated total facility charge for advanced reservations. The system should allow for special discounts and other non-standard rates.
6. The reservation module/function should allow for additions, changes, cancellations, report printing, reactivation, copy of user information from one reservation to another, etc. In addition, it should provide the various display screens such as:
 - a. display of available sites for booking for any range of dates.
 - b. display of a particular site.
 - c. display of user groups by summary or by details.
 - d. block/unblock a site by user group.
 - e. show all reservations assigned to a particular site.
 - f. show all sites assigned to a specific reservation.
 - g. display total sites reserved versus total sites available for any date.
 - h. display the total number of sites reserved by user type per day.
 - i. display the all facilities reserved for a specific date and time.

- i. forecast facility availability reports.
- 7. Billing by cash, credit card or split between user group and individual.
- 8. Accommodates special requests and comments for each reservation.
- 9. Custom design and print confirmation forms for a variety of purposes such as:
 - a. new reservation confirmation
 - b. deposit confirmation
 - c. notification to the facility user of any changes made to the reservation or cancellation of the reservation.
- 10. Marketing module that effectively tracks facility users, including a user history database of participants who have used a facility with name, address, phone, facility site, date of reservation, comments, etc. The module should also provide complete mail merge support for marketing purposes.
- 11. Organizes the facility site supervisor with instant user/site information such as:
 - a. site status: reserved, available or closed for maintenance
 - b. display site by type, status, location or special features
 - c. search for user by name, site, group name or reservation date
 - d. display users (alphabetically) by site
 - e. display site by user
- 12. Print billing information by site and user.
- 13. Track complaint/problem maintenance and preventative maintenance on the site by site supervisors and users.
- 14. Provides access to equipment inventory to help control usage and misusage of equipment.

V. Hardware decisions.....what to look for.

Once you have selected your software or have identified the type of software that you would like to have developed for your base, the next step is selecting the hardware. While general hardware considerations apply to facility reservation systems, now is the time to determine specific hardware needs that will meet the needs of your software. Your software dealer will provide you with the information concerning the amount of memory, hard disk capacity, video requirements, type of printer and other items your hardware system will need. Pay particular attention to processor speed, hard disk size, tape back-up and LAN capabilities.

VI. Summary

In order to have an effective and efficient computerized reservation system, you must study each element of the program.....both the computer and your current manual system. There are many good reservation systems available, but they will only work for you if they meet your needs. By identifying your program and staff needs and expectations, you will not only be satisfied with the system, but it will prove to be very cost effective both in terms of staff time and financial savings.

COMPUTERIZED RECREATION REGISTRATION SOFTWARE

I. Introduction

Computerized recreation registration software programs were developed to assist with program registration for scheduled events which are programmed parks and recreation agencies. The software enables recreation administrators to disseminate information more effectively and efficiently to participants, instructors, facility managers, registration clerks and other office staff members. Most commercial application packages are fully integrated with other recreation modules and offer complete menu driven and easy to use programs that are adaptable to a wide variety of recreation agencies. Automated recreation registration software programs streamline the process of registering individuals and/or groups for all types of recreation programs, classes, sports, aquatics, trips, seminars and memberships regardless of the setting.

II. Understanding your environment.....questions you need to ask yourself.

For a computerized recreation registration system to be successful, many items need to be taken into consideration. Each of us has different needs and constraints, different facilities/program offerings and varying levels of staff/financial support which all must be taken into consideration before a system can be effectively computerized. Questions that should be addressed prior to selecting a software program include:

1. How are program/activity registrations currently accepted?
2. Is there a central location for registering or are multiple sites used?
3. Can registrations be made by phone, mail or walk-in?
4. Do you maintain waiting lists? If so, how are individuals informed of an opening?
5. What financial system is currently in place for refunds?
6. How do facility scheduling and program registration interface?
7. What reports would you like?
 1. class rosters
 2. instructor schedules
 3. facility schedules
 4. fiscal reports
 5. registration receipts

These represent only a few of the general questions that must be addressed. Each agency must develop a list of pertinent questions for their specific setting and operation.

III. Software selection.....what to look for when purchasing a software package.

After you have identified your registration needs, the next step is to list features that any potential software package should have. In working with registration systems, it is important that the system interfaces with a number of functions/modules. Basically a complete computerized registration system should include the following features/modules:

1. Program brochure/catalog generator
 - a. Allow formatting and previewing of various program catalog styles on-screen.
 - b. Produce copy for program brochure/catalog that includes the activity description, dates, times, facility location, fees, instructor, etc.
 - c. Allow exporting of registration data to word processing or desktop publisher software.
2. Mass mailing list management
 - a. Create mail merge files for postcard or letter follow-up correspondence.
 - b. Query on various user-defined demographic information for marketing purposes.
 - c. Produce mailing labels of all current and past enrollees.
3. Activity/class management
 - a. Manage activity/class information.
 - b. Track activity/class enrollment totals.
 - c. Support LAN on-screen enrollment inquiries at various facility sites.
 - d. Handle waiting lists and roster changes. Support lottery enrollments and enrollment transfers.
 - e. Track any activity/class prerequisite requirements, insurance forms, age limitations, equipment/supplies, etc. for each activity/class.
 - f. Automatic display of open and closed classes.
 - g. Allow for pre-registration as well as mail-in, phone-in and walk-in registrations.
 - h. Provide "carry-over" of activity information from season to season thus eliminating the need to re-enter similar information.
 - i. Provide an enrollment history for each participant.
 - j. When an activity is closed, the system should place subsequent enrollments on a prioritized waiting list. Second choice activities should be calculated for any participant who is placed on a waiting list.

4. **Membership management**
 - a. Manage membership entries and sales totals.
 - b. Allow individual and group membership/packages. Maintain family information to allow multiple family members to enroll without having to duplicate basic demographic data.
 - c. Track enrollments for particular families.
 - d. Support bar code reading and ID validation at activity sessions.
 - e. Develop financial and membership reports.
5. **Facility reservation system**
 - a. Perform facility searches by user-defined criteria.
 - b. Process activity class facility requests.
 - c. Check the availability of desired facility with activity class usage demands and automatically reserve facility.
 - d. Print facility site calendar and daily reservations.
6. **Instructor management**
 - a. Calculate multiple pay rates based on hourly, percentage or flat fee rates for multiple instructors assigned to any given activity. Calculates total hours of instruction provided by each instructor.
 - b. Track personnel information such as job descriptions, performance appraisals, etc.
 - c. Print teaching assignments.
 - d. Produce instructor contracts or agreements.
7. **Reports**
 - a. Print registration receipts for participants.
 - b. Individual/group payment history report.
 - c. Print activity/class rosters.
 - d. Flexibility to use "plain paper".... special forms may or may not be used.
8. **Fiscal management**
 - a. Support user-defined revenue codes.
 - b. Handle refunds, activity class transfers, etc.
 - c. Produce end of the day/period financial reports.
 - d. Calculate income/expense/net revenue reports.
 - e. Support full and partial payment plans.
 - f. Perform basic cost analysis functions.
 - g. Allow for optional sales tax and additional charges such as manuals and supplies.
 - h. Allow for cancellations with full or partial refund processing, discounts and other miscellaneous transactions that interfaces with a general ledger program.
 - i. Calculate resident or non-resident enrollments with respective fees.

Other features that should be considered include:

1. Listing of family members for multiple registration.
2. Track class progress indicating classes both with openings as well as though which are closed.
3. Up-to-date registration statistics including openings, percentage of current classes with available openings, etc.
4. Track individual membership dues balances with the remaining amount due and date due automatically updated.
5. Allow for multiple class fees, extra charges, adjustment and taxes.
6. Allow no limits to the number of teaching assignments per instructor.
7. Flexibility to have multiple instructors assigned to teach any given activity.
8. Assign geographic area for target marketing.
9. Allow an individual to be associated with more than one family or group and provide ability to record individual address and phone numbers for each group member.
10. Specify individual or group membership for personal or corporate participants.
11. Allow multiple age groupings and types of participants.
12. Billing by cash, credit card or split between user group and individual.

13. Track each transaction by agency staff member who entered registration information

IV. General hardware requirements.

Once you have selected your software or have identified the type of software that you would like to have developed for your agency, the next step is selecting the hardware. While general hardware considerations apply to registration systems, now is the time to determine specific hardware needs that will meet the needs of your software. Your software dealer will provide you with the information concerning the amount of memory, hard disk capacity, video requirements, type of printer and other items your hardware system will need. Pay particular attention to processor speed, hard disk size, tape back-up and LAN capabilities. Most window applications require a minimum of 4MB RAM (8MB preferred), 386mz processor speed (486mz preferred), and 50MB of disk space.

V. Summary

Computerized recreation registration systems are a tremendous tool for recreation administrators. An effective system will consolidate several manual functions of the registration process into one streamlined automated process. This will enable you to maintain accurate and detailed information on all of your recreation programs and instructors thus creating an effective information and communication network. Quality controls for financial accounting will be enhanced and will provide the recreation staff ready access to information by class, participant, location and activity. Hard copy rosters are produced for instructors and mailing labels can be produced for various categories upon demand. In addition, the system can provide information on the number of individuals participating in the program as well as the number of programs that are being offered. An automated registration system will enhance and improve the "customer service" image that your department is able to provide to your community by offering greater capacity, speed, accuracy, up-to-the-minute rosters and comprehensive record-keeping.

FITNESS/WELLNESS SOFTWARE

I. Introduction

Why is there a need for fitness software? The fitness industry has experienced a tremendous increase in the number of fitness activity programs offered each year. Due to this increase in popularity, many fitness software programs have been developed to assist the fitness practitioner with the management of these programs. Software can assist in the following areas:

- ◆ Customer service and participant retention. Participants who obtain results in actual printouts and see progress are motivated to continue using your facility and program.
- ◆ A fitness software application provides a personalized caloric, nutrition and exercise program to help participants meet their goals.
- ◆ Great way to promote your facility and program and attract new members. For example, you may conduct a mini-test promotion one week for stress assessment. The next week may be blood pressure, the next body composition, and so on.
- ◆ Usually programs have a "Quick Test" which allows you to perform a single test and provide a one page printout of their results. Ideal for testing large groups of people at different special events and marketing your program.
- ◆ Group evaluations are ideal for contests and wellness programs..

II. Types of Fitness/Wellness Software

There are a variety of fitness and wellness software applications. Among the most popular for recreation and park programs are:

1. Fitness Assessment Profile
2. Health Risk Assessment
3. Personal Fitness Programs
4. Weight Management Programs

III. Fitness Assessment Profiles

The most popular fitness assessment test is the PAR-Q pre-test screening questionnaire that helps to identify individuals who should obtain medical approval before proceeding with profile. Other tests include:

Biometrics: Medical history, blood pressure, heart rate, blood chemistries, girth, body weight.

Cardiovascular Fitness: Treadmill, bike ergometer, 1mi walk, 12 minute run, step test.

Muscular Strength: Isometric, hand grip, push-ups, sit-ups, bench press, leg press.

Flexibility: Sit & reach, trunk & shoulder rotation.

Body Composition: Skin folds.

IV. Health Risk Assessment

This type of program analyzes a person's health history and current lifestyle and estimates his or her risk of early death or illness. A program would not detect an illness already in progress but would analyze a person's physiology and lifestyle factors such as body fat, cholesterol, tobacco use, alcohol consumption, etc. to compute their health impact over the next 5-10 years.

- It is a combination of education, motivation and peer support which helps an individual adopt healthy personal habits.
- Software produces a wellness score with specific recommendations.
- Software uses data from national institutes such as the Center for Disease Control (CDC), National Cancer Institute, American Heart Association, etc. who study various risk factors: cancer risk, heart disease, nutrition habits, blood chemistries, diabetes, etc.

V. Personal Fitness Programs

1. Weight Management
2. Meal Planners
3. Individualized Exercise Prescriptions for Each Participant

- Compatible with variety of exercise equipment and activities.
- Should have common exercise machines, sports and exercises.
- Should be able to modify list at any time to include whatever additional equipment or activities are introduced.

VI. Exercise Prescriptions

1. Brief medical history should be presented at the beginning of each plan to help identify those individuals who should have medical clearances before continuing.
2. Software then checks individuals personal profile for most recent body fat, strength, flexibility and cardiovascular data. Profile components with a score of average or less are highlighted for suggested improvement. Participant then chooses areas in which they would like to improve with the plan.
3. Participant commits to a weekly workout schedule....identifying specific days and times they will exercise. The program checks the amount and type of exercise selected to insure the final exercise plan will be safe and effective.
4. Aerobic and strength training plans. Aerobic program plan is usually 1-12 weeks based on one or more aerobic training apparatus and usage guidelines from national sources (ie. ACSM, etc.). The strength program usually uses free weights. A nice software feature allows staff to create customized aerobic and strength training plans.

Sport Scheduling Software Chart

	A.E. Klawitter & Associates (800) 666-4235	EZ Score Promotions (803) 281-0960	Schlessner-Copeland (419) 352-8429	MarketShare Development (770) 944-8730	Overtime Software, Inc. (800) 467-0493	PC+ (714) 551-4576	RecWare by Sierra Digital (916) 925-9096	Vermont Systems (802) 679-6993
PRODUCT NAME	AEK Sports Scheduling	League Standings	Intramural Participation System (IPS)	Leading Edge Sports Scheduling	Schedule Wizard/Tournament Wizard	SchedMate	RecWare League Scheduling	RecTrac League Scheduling Module
VERSION NUMBER	3.0	1.0	2.0	3.0	2.0/2.0	2.3	3.5	8.1
COST ¹	\$4,160 Sgl-DOS Multi-user varies	\$62.50	\$1,195 Standard \$1,695 Full	\$225	\$300-\$450 Sgl Multi-user varies	\$200	\$1,350 Single \$559 Limited	\$950 Single \$1,250 Multi
PLATFORM	DOS, Windows Unix, VAX/VMS	DOS	Windows/ Macintosh	Windows	DOS, Windows	DOS	DOS, Windows	DOS, Windows VAX/VMS, Sun
LANGUAGE PROGRAM WRITTEN IN	Thoroughbred	C	FoxPro	Visual Basic	C++	Quick Basic	C/FoxPro	4GL Progress
SOURCE CODE AVAILABLE	Yes	No	No	No	No	No	No	No
MULTI-USER/LAN NETWORK	Yes	No	No	No	Optional	No	Yes	Yes
HARDWARE REQUIREMENTS	Disk space required for application Recommended processor speed Recommended RAM	20 MB 386 or higher 8 MB	DD Diskette 386 and up 4MB	5MB 386/88030 8MB	.5 MB 386 or higher 8 MB	2 MB 386 or higher 840K	3 MB 286/18 1 MB	4 MB 286 or higher 840K
REPORTS								
Headers/footers be user defined?	Titles	Sponsor titles	Yes	Yes w/export text	Header	Yes	No	Partial
Team schedules printed w/ one request?	Yes	Yes	Yes	Yes	Yes	In development	Yes	Yes
Individual team schedules upon request?	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Fonts supported?	Courier/TT	Courier	Window/Mac	Default windows	Default printer	User loadable	Windows	Text Type
Printers are supported?	Dot matrix/laser	All	Dot matrix/laser	Dot matrix/laser	Dot matrix/laser	User loadable	Dot matrix/laser	Dot matrix/laser
Does program print:	League directories League rosters Team rosters Master schedule League schedules Court/field availability Result sheets League standings League information Team information Official/umpire schedules	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	Yes Yes (April, 96) Yes Yes (April, 96) Yes Yes Yes (April, 96) Yes Yes Yes Yes	No No No Yes Yes Yes Yes No No No	Yes Yes Yes No Yes Yes Yes Yes Yes Yes Yes	Yes No No Yes Yes Yes Yes No Yes Yes Yes	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	No Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
Game reports be printed by:	Home/away Facility site Court/field Time Specific date Range of dates	Yes Yes Yes Yes Yes Yes	Yes Yes To be updated Yes Yes Yes	No Yes Yes (April, 96) No Yes Yes	No No No No No No	No Yes Yes No No No	In development In development In development In development In development In development	Yes Yes Yes Yes Yes Yes
Game times recorded in:	Standard AM/PM Military	Yes No	No Yes	Yes Yes	Yes No	Yes Yes	No Yes	Yes No
LEAGUE SCHEDULING								
Maximum # of total teams?	98,901	Unlimited	Unlimited	30 per division	Unlimited ³	3,000	Unlimited ²	Unlimited ²
Maximum # of divisions per sport?	99	Unlimited	Unlimited	30 per league	Unlimited	200	Unlimited	Unlimited
Maximum # of leagues?	999	Unlimited	Unlimited	1	Unlimited	200	Unlimited	Unlimited
Maximum # of teams per league?	99	32	8	30	32	15	99	999
Maximum # of rounds per league?	999	2	Unlimited	30	Unlimited	2.5	99	99
Maximum # of players per team?	99	20	Unlimited	NA	100	NA	99	999
What league formats are supported?	Single round robin Double round robin	Yes Yes	Yes Yes	Yes Yes	No No	Yes Yes	Depends on # of teams/league	Yes Yes
How are leagues formed?	Random User entered As soon as team enters	No Yes No	No No Yes	No Yes Yes	No Yes Yes	No Yes Yes	No Yes Yes	No Yes No
Current standings tracked?	Yes	Yes	Yes (April, 96)	No	Yes	No	Yes	Yes
Home facilities scheduled automatically?	No	Yes	Yes (April, 96)	Yes	Yes	No	Yes	Yes
Home/visitor assignments alternated?	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Rainouts rescheduled:	Manually Automatically	Yes Yes	Yes Make-up	Yes No	Yes Yes	Yes No	Yes No	Yes Yes
Manual overriding/adjusting of schedules?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Can league schedules be produced by:	Round robin # of weeks	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes
"Exceptions" or non-play dates allowed?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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Back to back capability?	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Will program seed teams by: Record Past performance Random User controlled	No No Yes Yes	No No No No	No No No No	No No No No	Yes No No Yes	No No No Yes	No No Yes Yes	Yes No Yes Yes
TOURNAMENT SCHEDULING								
Maximum # of total teams?	98,901				Unlimited			Unlimited
Maximum # of divisions per sport?	99				Unlimited			47
Maximum # of teams per bracket?	99				128			97
Maximum # of players per team?	99				Unlimited			999
What tournament formats are supported: Single elimination Double elimination Consolation	Yes Yes Yes				Yes Yes Yes			Yes Yes Yes
How are brackets formed: Random User entered	No Yes				Yes Yes			Yes Yes
Does program "draw" bracket worksheet?	No				Yes			Yes
Display of winners/losers brackets?	No				Yes			Yes
Current standings tracked?	No				Yes			Yes
Home facilities scheduled automatically?	Yes				No			Yes
Home/visitor assignments alternated?	No				No			Yes
Rainouts rescheduled: Manually Automatically	Yes No				Yes No			Yes No
Manual overriding/adjusting schedules?	Yes				Yes			Yes
"Exception" or non-play dates?	No				Yes			Yes
Back to back game capability?	Yes				Yes			Yes
Does program seed teams by: Record Past performance Random User controlled	No No No Yes				Yes Ranking Yes Yes			Yes No Yes Yes
MISCELLANEOUS								
Game Officials Scheduled By: Gender Officiating skill level Team skill level	No No No	No No No	No No No	No No No	No No No	No No No	No No No	No Yes Yes
Does program compile statistics by: Team/league leaders Summary reports: # of games played # of forfeits # of rainouts	No Yes Yes No	No Yes Yes Yes	Yes (April, 96) Yes (April, 96) Yes (April, 96)	No No No	No Yes Yes	No No No	No No No	No Yes Yes
Is tutorial provided with program?	Documentation/ Training Guide	Yes/manual	Yes	Yes	On-line Help/ documentation	On-line	Yes	Yes
What interfaces are available: Facility scheduling Registration	Yes Yes	No No	Yes (April, 96) Yes	No No	Yes Yes	In new release In future	Yes Yes	Yes Yes
Is demo disk available?	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Import data file types supported?	ASCII	No	No	None	CSV, ASCII, Fixed length	NA	ASCII, DBF	ASCII
Export data file type supported?	ASCII	No	ASCII/Text	Text	CSV, ASCII	NA	ASCII	ASCII
Is there an annual yearly maintenance fee?	1st yr free, then 15%-license fee	No	No	No	No	No	\$339	\$gl-\$150 Multi-\$180
Are pop-up lookup windows provided for: Calendar Team Codes Facility Codes League Codes	No Yes Yes Yes	Yes Yes Yes Yes	No Yes Yes Yes	Yes No No No	Yes Yes Yes Yes	No Yes In development Yes	Yes Yes Yes Yes	Yes Yes Yes Yes
Technical Support	Part of maintenance fee	Free	2 hrs free	Free Unlimited	Unlimited, 800 telephone	20 hrs free Paid support	Paid support	Part of maintenance fee
Regular support hours	8:00-5:00 M-F (Client Time)	NA	8:00-5pm EST	9:00-8:00 M-F (EST)	9:00-5:00 M-F (EST/EDT)	8:00-5:00 M-F (PDT)	6:00-5:00 M-F (PDT)	8:00-6:00 M-F (EST)
Other:	24 hrs/7 days week support	Money back guarantee	Scoresheets Demographics	30 day money back guarantee	Evaluation version available	Discounts for timely purchase	Free demo disks	Money Back Guarantee

Note: Information for the chart was provided by each vendor. The authors take no responsibility for the validity of the information nor do they endorse any product. The full article may be found in: Ross, C.M. & Wolter, S. A. (1996). "On-Schedule," *Athletic Business*, 20(4), April, 1996, 47-52.

¹For more information on single and multi-user pricing of a product, contact the vendor directly. ²Unlimited usually refers to the limitations of the hard drive.

Computerized Sport Scheduling Vendor Chart (Update 2)

	EZ Score Promotions (803) 281-0960	BSN Sports (800) 527-7510	TeamWare, Inc. (918) 836-9900
PRODUCT NAME	League Standings	Big League Administrator Sports Pac	Softball Edition 1.0
VERSION NUMBER	1.0	1.10	1.1
COST¹	\$82.50	\$395.00	\$49.95
PLATFORM	DOS	Windows	Windows
LANGUAGE PROGRAM WRITTEN IN	C	Visual Basic/Access	Visual Basic/Access
SOURCE CODE AVAILABLE	No	No	No
MULTI-USER/LAN NETWORK	No	Yes	No
HARDWARE REQUIREMENTS Disk space required for application Recommended processor speed Recommended RAM	DD Diskette 386 and up 4MB	10 MB 386/486 33Mz 8MB	8 MB 486 50Mz 8MB
REPORTS			
Headers/footers user defined?	Sponsor titles	Yes	No
Team schedules printed w/ one request?	Yes	Yes	Yes
Individual team schedules upon request?	No	Yes	Yes
Fonts supported?	Courier	Windows	Windows
Printers are supported?	All	All	All
Does program print: League directories League rosters Team rosters Master schedule League schedules Court/field availability Result sheets League standings League information Team information Official/umpire schedules	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	No Yes Yes Yes Yes Yes Yes Yes Yes Yes	Yes No Yes Yes Yes Yes No No Yes Yes Yes
Game reports be printed by: Home/away Facility site Court/field Time Specific date Range of dates	Yes Yes To be updated Yes Yes Yes	No Yes No No No No	No No No No Yes Yes
Game times recorded in: Standard AM/PM Military	No Yes	Yes No	Yes No
LEAGUE SCHEDULING			
Maximum # of total teams?	Unlimited	Unlimited	Unlimited
Maximum # of divisions per sport?	Unlimited	Unlimited	Unlimited
Maximum # of leagues?	Unlimited	Unlimited	Unlimited
Maximum # of teams per league?	32	Unlimited	Unlimited
Maximum # of rounds per league?	2	Unlimited	Unlimited
Maximum # of players per team?	20	Unlimited	Unlimited
What league formats are supported? Single round robin Double round robin Triple round robin	Yes Yes No	Yes Yes Yes	Yes In Development Future Release
How are leagues formed? Random User entered As soon as team enters	No No Yes	No Yes No	No No Yes
Current standings tracked?	Yes	Yes	Yes
Home facilities scheduled automatically?	Yes	No	No
Home/visitor assignments alternated?	No more than 2 away/2 home	Yes	Yes
Rainouts rescheduled: Manually Automatically	Yes Make-up	Yes No	Yes No
Manual overriding/adjusting of schedules?	Yes	Yes	Yes
Can league schedules be produced by: Round robin # of weeks	Yes Yes	No Yes	Yes Yes
"Exceptions" or non-play dates allowed?	Yes	Yes	Yes

	EZ Score Promotions (803) 281-0960	BSN Sports (800) 527-7510	TeamWares, Inc. (918) 836-9900	
Back to back capability?	Yes	No	Yes	
Will program seed teams by: Record Past performance Random User controlled	No No No No	No No No Yes	No No Yes No	
TOURNAMENT SCHEDULING				
Maximum # of total teams?			Unlimited	
Maximum # of divisions per sport?			Unlimited	
Maximum # of teams per bracket?			Unlimited	
Maximum # of players per team?			Unlimited	
What tournament formats are supported: Single elimination Double elimination Consolation			Yes No In Development	
How are brackets formed: Random User entered			No Yes	
Does program "draw" bracket worksheet?			Yes	
Display of winners/losers brackets?			Yes	
Current standings tracked?		In Development	Yes	
Home facilities scheduled automatically?			No	
Home/visitor assignments alternated?			No	
Rainouts rescheduled: Manually Automatically			Yes No	
Manual overriding/adjusting schedules?			Yes	
"Exception" or non-play dates?			Yes	
Back to back game capability?			Yes	
Does program seed teams by: Record Past performance Random User controlled			In Development In Development Yes In Development	
Game Officials Scheduled By: Gender Officiating skill level Team skill level	No No No	No No No	No No No	
Does program compile statistics by: Team/league leaders Summary reports: # of games played # of forfeits # of rainouts	No Yes Yes Yes	In development	Yes Yes No No	
MISCELLANEOUS				
Is tutorial provided with program?	Yes/manual	Yes/Helps	Yes	
What interfaces are available: Facility scheduling Registration	No No	Yes Yes	Yes Yes	
Is demo disk available?	Yes	Yes	No	
Import data file types supported?	No	NA	None	
Export data file type supported?	No	All formats	MS Access	
Is there an annual yearly maintenance fee?	No	No	No	
Are pop-up lookup windows provided for: Calendar Team Codes Facility Codes League Codes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Not needed Not needed Not needed	
Technical Support	Free	Free Unlimited	Free Unlimited	
Regular support hours	NA	8-8 CST	8-5 CST (M-F)	
Other:	Money back guarantee	Money back guarantee	Money back guarantee	

Note: Information for the chart was provided by each vendor. The authors take no responsibility for the validity of the information nor do they endorse any product.

¹For specific details on single and multi-user pricing of a product, contact the vendor directly.

²Unlimited usually refers to the limitations of the hard drive.

Updated on March 31, 1995

Facility Scheduling Software Chart

	A.E. Klawitter & Associates (847) 392-6880	CEO Software, Inc. (800) 441-2581	Escom Software Services (800) 661-1196	THE-Programmed For Success (800) 488-PFSI	Overtime Software (800) 467-0493	R.I.C. Corporation (219) 432-0799	Vermont Systems, Inc (802) 879-6993
PRODUCT NAME	AEK Facility Scheduling	SCHEDULER PLUS	CLASS	Facility Reservations and Rentals	Facility Wizard	ConCentRICs	RecTrac Facility Reservation Module
VERSION NUMBER	5.0	5.35	2.51	3.7	2.0	2.0	8.1
PRICE							
Single user version	\$5,000			\$3,750	\$150	\$50-\$350 per user, per module	\$1,950
Multi-user LAN version	\$500 per add'l	\$2,250	\$1,250 per user	\$6,500	Varies		\$2,450
PLATFORM	DOS, Windows Unix, NT, Novell	DOS, Windows, 95, NT, VMS, Novell	Unix, Windows, 95 NT, VMS, Novell	DOS	Windows	Windows, VMS	DOS, Windows, Unix, Sun, HP
LANGUAGE WRITTEN IN	Thoroughbred	C++	Visual Basic/C++	C++	Microsoft Access & C++	C++	4GL Progress
SOURCE CODE AVAILABLE	Yes	No	Escrow only	Yes	No	No	No
MULTI-USER/LAN NETWORK	Yes	Yes	Yes	4th Qtr '96	Yes	Yes	Yes
HARDWARE REQUIREMENTS							
Disk space required for application	30MB	12MB	30MB	600KB	10MB	40MB	20MB
Rec processor speed	486-66	486-66	486-DX-66	386/33	386/486	486	386 +
Recommended RAM	8-16MB	8MB	12MB	600KB	8MB	16MB	2MB +
BOOKINGS							
How many years can a reservation be booked in advance?	Unlimited	Year 2035	Unlimited	60	Unlimited	Unlimited	Unlimited (Summer, 1996)
Does program:							
View availability by type of facility	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Display # of facilities by location	Yes	Yes	Yes	Yes	Yes	Yes	Yes
View multiple facilities at the same time	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Allow overbooking by a facility	No	No	For programs only	No	Yes	Yes	No
Assign "set-up" and "clean-up" times individually controlled by facility and event	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tentatively block off facility while details are being worked out	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reactivate canceled reservations	No	Yes	No	No	In development	Yes	No
Book facility by capacity needed	Yes	Yes	Yes	Yes	No	Yes	Yes
Repeat bookings on a daily/weekly/seasonal basis	Yes	Yes	Yes, no seasonal	Yes	Yes	Yes	Yes
Allow special discounts	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Does program search for users by:							
Last name	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Facility type	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Group name	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Arrival date	Yes	Yes	No	Yes	Yes	Yes	Yes
Does program search for available facilities by:							
Keywords (kitchen, lighted diamond)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Room capacity	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Date-range	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time of day	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Does program:							
Allow different units of time for different facilities?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Carry blocks of bookings to another facility?	Yes	Yes	Yes	Yes	In development	Yes	Yes
Book only portions of a facility?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Book scheduled maintenance periods?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Provide for manually overriding/adjusting schedules?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Allow for facility searches to identify first available facility meeting minimum criteria?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Handle shared usage (i.e. soccer field overlapping baseball diamond)	Yes	Yes	Yes	Yes	No	Yes	Yes
What is the maximum # of:							
Facilities that can be scheduled?	9,999	Unlimited	Unlimited	9 ²⁴	Unlimited	Unlimited	Unlimited
Overlapping facilities allowed?	9,999	Unlimited	Unlimited	9 ²⁴	99	Unlimited	Unlimited
Days which can be scheduled?	Unlimited	Unlimited	Unlimited	9,999	Unlimited	Unlimited	Unlimited
Reservations per facility/day?	Unlimited	Unlimited	Unlimited	1,440	Unlimited	Unlimited	1,439

	A.E. Klawitter & Associates (847) 392-6880	CEO Software, Inc. (800) 441-2581	Escom Software Services (800) 661-1196	THE-Programmed For Success (800) 488-PFSI	Overtime Software (800) 467-0493	R.I.C. Corporation (219) 432-0799	Vermont Systems, Inc (802) 879-6993
Does program provide for: Equipment rental of items for each facility Listing of equipment items by facility Listing of equipment rental charges Equipment set-up and take-down instructions	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes Yes Yes Yes	Yes No Yes Yes	In development In development In development In development	Yes Yes Yes No	Yes No Yes Yes
MISCELLANEOUS							
User defined password security?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tutorial provided?	Yes	Yes	Yes	Yes	On-line help	In development	Yes
What interfaces are available: Tournament scheduling Registration Other:	Yes Yes Maintenance, Accts Payable	Yes Pending Catering, Personnel	No Yes POS, Accounting, Membership	Yes 4th Qtr 1996 None	Yes Yes League Scheduling	No No None	Yes Yes Pass Mgmt, POS, Equip Rental, Acct Payable
Demo disk available?	Live demo	Yes	Yes	Yes	Yes	Yes	Yes
Working copy available for evaluation purposes?	No	Yes	Yes	Yes	Yes	Yes	Yes
Import data file types supported?	ASCII	ASCII	ASCII	None	Text, CSV, dBASE, Etrieve	Varies by module	ASCII
Export data file types generated?	ASCII	ASCII	ASCII	None	Text, CSV, dBASE, Etrieve	ASCII	ASCII
Annual maintenance fee?	Yes-2nd yr optional	15% of list price	Yes	Yes	Yes	15% of purchase price	Yes
Technical support	800 telephone	Unlimited 800 telephone & telephonic training	Unlimited 800 telephone	Toll free telephone	Unlimited 800 telephone	Free with maintenance	Unlimited 800 telephone
Regular support hours	8:00-5pm M-F (Client Time)	8:00-5pm M-F (MST)	6:30-5:30pm M-F (PST)	8:00-8pm M-F (EST)	9:00-5pm M-F (EST)	24 hours	8:00-6pm M-F (EST)
Other:	1 yr warranty; 24hr/7days week support	30 day money back guarantee	Lifetime guarantee 100% money back guarantee		30 day money back guarantee		Money back guarantee

Note: Information for the chart was provided by each vendor. The authors take no responsibility for the validity of the information nor do they endorse any product. The full article may be found in: Ross, C. M. & Wolter, S. A. (1997). "On-Time Facilities," *Athletic Business*, 21(4), April, 1997, 55-61.

For specific details on single and multi-user pricing of a product, contact the vendor directly.

Recreation Registration Software Chart

	A.E. Klawitter & Associates (800) 666-4AEK	Aspen Information Systems (414) 241-5538	HTE-Programmed for Success, Inc. (800) 488-7374	Overtime Software, Inc. (800) 467-0493	Sierra Digital, Inc. (888) RECWARE	Vermont Systems, Inc (800) 377-7427
Working copy available for evaluation purposes?	Remote live product demo	Yes	Yes	No	Yes	Yes
Annual maintenance fee?	Yes - Optional 20% of license fees beginning second year	Yes, 15% of module price	Yes, depends on purchase	Yes, varies in pricing	Yes, \$495	Yes, \$350 single; \$440 multi
Technical support	800 phone, paid support part of maintenance fee	Included in maintenance fee	Included in maintenance fee	Free 800 phone support for 1st six months, optional yearly maintenance fee	Included in maintenance fee, also toll free fax	Free unlimited 800 phone support included in maintenance fee
Regular support hours	M-F 7:30am-6pm CST	9am-5pm CST	8am-8pm EST	M-F 8:30am-5pm EST	6am-5pm PST	M-F 8am-6pm EST
Other:	Money back guarantee, 24 hrs, 365 days/yr support	90 day guarantee, 24 hr support			Grand Prize winner of 1996 Helen Putnam award for government efficiency	Money back guarantee

Note: Information for the chart was provided by each vendor. The authors take no responsibility for the validity of the information nor do they endorse any product. The full article may be found in: Ross, C. M. & Wolter, S. A. (1997). "Registration Information," *Athletic Business*, 21(10), October, 1997, 59-65.

For specific details on single and multi-user pricing of a product, contact the vendor directly.



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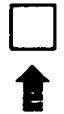
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